

METHODS AND APPARATUS FOR BRIDGING DIFFERENT VIDEO FORMATS**ABSTRACT**

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[0084] A video format bridge employs a plurality of techniques to insure that the line buffer does not suffer underflow or overflow conditions, and that the output frame rate matches the input frame rate. The bridge handles the problem of residue lines, addresses fluctuations in the input and output clock rates, and allows adjustment of the ratio of the input and output the
10 number of lines per frame or number of pixels per line so that output device specifications are not exceeded. A single integrated circuit may provided which is adapted to perform a plurality of techniques, and includes resources by which the user is able to enable and disable such techniques as needed for the particular bridging operation being executed. Bridge logic produces an output video stream which has an output frame rate matching the input frame rate, and in
15 which the output frame has at least one of a variable number of pixels per line within an output frame, and/or a variable number of lines per frame among output frames in a set of more than one output frames.